

APPENDIX D. MCAS MIRAMAR INRMP PROJECTS

Planned INRMP projects within this chapter are summarized by general topics (e.g., Special Status Species Management, Vernal Pool Management, Fish and Wildlife Management), in the order used in chapters 7 and 9. Individual must fund and other planned projects within each of these general topics are budget items entered into the Marine Corps CompTRAK budget system.

Individual projects are described in a standard format to facilitate input into the CompTRAK system and provide a means of monitoring overall INRMP implementation. All actions and projects are summarized in Appendix G to provide a means of monitoring overall INRMP implementation.

Project format (USMC 2004) is as follows:

Project: Title and CompTRAK number (if already in the budget system)

Description: A brief summary of the planned action.

Driver: A driver identifies a need to be satisfied in order for the mission to continue without disruption. Management drivers are installation unique and are defined by the mission, land uses to support the mission, and natural resources affected by the mission¹.

Implementation Timeframes: Calendar year the project is planned to be executed. Some projects are ongoing or as-needed.

Required Funding: Funds required by fiscal year, budget classification (see Section 9.1.1, *Funding Definitions*), and general source of funding (Agricultural, Centrally Managed Environmental Program (CMEP), or Operations Budget (OPBUD))

Regulatory Approvals Required: Used if projects are legally required to have some form of coordination, consultation, or permitting from an outside agency.

Project Implementation Vehicle: Generally either in-house or contract with the understanding that even contract projects require in-house support/monitoring.

Priority: A priority system for ranking projects within this INRMP.

Success Monitoring: Quantitative or qualitative means used to determine how well the project is meeting the purposes of the INRMP and the military readiness mission of the Station.

Each general section has an objective(s). Under each objective is a list of projects in the above format. Projects for each objective are grouped as either “must fund projects” or “other planned projects.” Must fund projects are either budget class 0 or 1; other planned projects are either budget class 2 or 3.

DoD Instruction 4715.3 describes funding classifications that pertain to “must fund” projects (Class 0 and Class 1) and other planned projects that are not required to meet INRMP implementation status (Class 2 and Class 3).

Class 0, Recurring Natural and Cultural Resources Conservation Requirements (“Federal and State laws, regulations, Presidential Executive orders, and DoD policies”) shall also include actions necessary to rehabilitate or prevent resources degradation that may affect military readiness.

Class 1, Current Compliance shall contain requirements to managed federally listed threatened or endangered species. Class 1 includes projects needed because an installation is currently out of compliance.

¹ Drivers often include compliance with laws and regulations. Military regulatory requirements are not included in driver descriptions since virtually all drivers are tied to general Department of Defense instructions and/or Marine Corps Orders.

Class 2, Maintenance Requirements shall include those projects that are not currently out of compliance but shall be out of compliance (with applicable laws, regulations, standards, Executive Orders, or DoD Policy) if projects are not implemented in time to meet an established deadline beyond the current program year.

Class 3, Enhancement Actions Beyond Compliance shall include projects that enhance conservation resources or the integrity of the installation mission, or are needed to address overall environmental goals and objectives, but are not specifically required under regulation or executive order and are not of an immediate nature.

MCAS Miramar INRMP Implementation Projects

Section 7.3.1, General Vegetation Management and Soil Conservation

Objective 1: Develop and implement a program for natural land and habitat restoration and rehabilitation.

Must Fund Projects:

Project: Invasive Species Control – MI55353

Description: Identify and control invasive plants, include physical removal of individual invasive plants, especially acacia (*Acacia* spp.), tamarisk (*Tamarix* spp.), and fennel (*Foeniculum vulgare*). Nuisance fauna control may also be included.

Driver: Comply with Plant Protection Act, Noxious Plant Control Act, and Executive Order 13112 to maintain fully functioning native ecosystems that can support military training activities, maximize training access, and minimize fire hazards.

Implementation Timeframes: Annually

Required Funding: 2006-10 - \$20,000 annually, Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: OPBUD all years - 3

Success Monitoring: Counts (individual plants and/or extent of coverage) of invasive species controlled and monitoring effects (generally qualitatively) of invasive species on ecosystem functionality.

Project: Minor Projects/Damage Repair – MI25555

Description: Implement repair actions annually during year when damage was caused. This also includes minor natural resource projects that cannot be identified in advance.

Driver: Provide a mechanism to respond to damage that could be associated with noncompliance of natural resource laws, e.g., ESA, CWA, or could affect the capability to train on damaged lands.

Implementation Timeframes: Annually, as needed

Required Funding: 2006-10 - \$5,000 annually, Class 0, OPBUD funds

Regulatory Approvals Required: Depends on project

Project Implementation Vehicle: Contract and/or in-house supplies

Priority: OPBUD: 2006-9; 2007-10; 2008-9; 2009-8; 2010-9

Success Monitoring: Monitoring occurs by (1) site visits, (2) repeated assessments of ecosystem functionality throughout any remediation, (3) initiation of any appropriate restoration, (4) consistent contract/letter of agreement quality assurance, (5) insurance of compliance in a timely manner, and (6) conduction of any appropriate regulatory consultations.

Project: Agricultural Outlease Management – MI99006

Description: Manage the agricultural outlease program, including the wholesale nursery and native seed collection.

Driver: Use provisions within the Military Construction Authorization Act to provide multiple use of Station lands, consistent with requirements of the military mission, and to provide a funding mechanism for other projects within this INRMP. Drivers for projects funded with agricultural lease receipts define drivers for this project.

Implementation Timeframes: Annually

Required Funding: 2006 - 2008 - \$13,000; 2009-10 - \$20,000, Class 0, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Southwest Division, Naval Facilities Engineering Command

Priority: Ag Outlease: all years - 1

Success Monitoring: A qualitative assessment by Southwest Division, Naval Facilities Engineering Command as to the value and operating efficiency of agricultural outleases on MCAS Miramar, particularly with regard to compatibility with the military mission.

Other Planned Projects:

Project: Vegetation Mapping – MI85555

Description: Update vegetation mapping of MCAS Miramar in a manner compatible with current databases and analyze changes since the 2000-based mapping. Ensure mapping reflects changes due to construction, restoration, fires, encroachment, etc. Determine needed changes to areas now classified as “disturbed.”

Driver: Provide data to analyze planned mission and mission support projects according to NEPA requirements and provide information needed to manage for naturally functioning ecosystems to support the military mission.

Implementation Timeframes: Initiate in 2008

Required Funding: 2008 - \$120,000, Class 2, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: Ag Outlease 2008-3

Success Monitoring: Delivery of GIS database and analysis report that are compatible with current database and provide landscape analysis of changes and initial evaluation of the causes of changes in vegetation.

Project: Restore Eroded Areas – MI0600002

Description: This project would use results of the 2005 soil erosion inventory (URS 2005) to repair and restore, in a priority fashion, significantly damaged areas on MCAS Miramar. Emphasis will be on support of military training and wildland fire management, significant soil loss, and important habitat restoration.

Driver: Restore eroded areas that could result in noncompliance with laws, such as ESA or CWA, or could affect the capability to train on eroded lands.

Implementation Timeframes: Initiate in 2006 and 2010

Required Funding: 2006 - \$80,000; 2010 - \$100,000, Class 2, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2006-3; 2010-3

Success Monitoring: Monitoring occurs by (1) site visits, (2) repeated assessments of native ecosystem functionality throughout any remediation, (3) initiation of any appropriate restoration, (4) consistent contract/letter of agreement quality assurance, (5) insurance of compliance in a timely manner, and (6) conduction of any appropriate regulatory consultations.

Objective 2: Continue the LTEM program of vegetation and soil conditions on MCAS Miramar.

Must Fund Project:

Project: Long-term Ecosystem Monitoring (Floral Component) – MI95556

Description: Resurvey the vegetation transect component of LTEM program. Analyze comparisons with results of 1999-2000 transect surveys.

Driver: Data are required to support a position that military use of the land is not having a significant impact on the environment, particularly the vegetation component.

Implementation Timeframes: Initiate in 2007

Required Funding: 2007 - \$150,000, Class 0, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2007-3

Success Monitoring: Delivery of GIS database and analysis report that are compatible with current database and provide analysis of changes and causes of changes in vegetation.

Section 7.4.1, Special Status Species Management

Objective 1: Proactively maintain up-to-date presence/absence, distribution, and habitat data for all Special Status Species to support project and activity planning, management, and implementation on MCAS Miramar.

Must Fund Projects

Project: Presence/Absence Gnatcatcher Surveys – MI37405

Description: Conduct Station-wide surveys for the coastal California gnatcatcher.

Driver: Comply with ESA, which requires that MCAS Miramar have reliable population data on federally listed species for the entire Station, to support military training activities with minimal disruption.

Implementation Timeframes: Initiate in 2006 and 2008

Required Funding: 2006 and 2008 - \$120,000, Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: OPBUD: 2006-5; 2008-5

Success Monitoring: Surveys for the coastal California gnatcatcher are completed on time and have information that is usable for management decisions.

Project: Endangered Least Bell's Vireo Surveys – MI97016

Description: This project completes breeding season surveys of MCAS Miramar to determine the locations of habitat use for endangered least Bell's vireos and the endangered southwestern willow flycatchers in appropriate habitat based on surveys in 1998, 1999, and 2000/2001. Sites will be mapped and territory permanence of the season will be monitored. GIS data layers with associated databases will be developed.

Driver: Comply with ESA, which requires that MCAS Miramar have reliable population data on federally listed species for the entire Station, to support military training activities with minimal disruption.

Implementation Timeframes: Initiate in 2007 and 2010

Required Funding: 2007 and 2010 - \$30,000, Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: OPBUD: 2007-4; 2010-5

Success Monitoring: Surveys for the least Bell's vireo and southwestern willow flycatcher are completed on time and have information and databases that is usable for management decisions.

Project: Non-Vernal Pool Endangered Plant Monitoring – MI0500005

Description: Implement the monitoring plan (Rebman and Dossey 2004) for willow monardella. Develop a long-term monitoring plan and baseline survey of Del Mar manzanita on MCAS Miramar.

Driver: Comply with ESA, which requires that MCAS Miramar have reliable population data on federally listed species for the entire Station, to support military training activities with minimal disruption.

Implementation Timeframes: Initiate in 2008

Required Funding: 2008 - \$130,000, Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: OPBUD: 2008-4

Success Monitoring: Population data for the willow monardella, Del Mar manzanita, and other federally listed non-vernal pool plants are up-to-date and are usable for management decisions.

Project: Vernal Pool Surveys – MI0NR03

Description: Re-survey and monitor the presence/absence of threatened and endangered fairy shrimp and plants for vernal pool habitat in operationally important areas on MCAS Miramar.

Driver: Comply with ESA, CWA, and NEPA, which requires that MCAS Miramar have reliable data on federally listed species and wetlands, to support military training activities with minimal disruption.

Implementation Timeframes: Initiate in 2009

Required Funding: 2009 - \$150,000, Class 1, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2009 - 3

Success Monitoring: Surveys for vernal pool habitat species are completed on time and have information and databases that is usable for management decisions.

Project: Endangered Quino Checkerspot Butterfly Survey – MI10NR09

Description: Conduct a Station-wide habitat assessment and survey 300 acres of the highest quality Quino checkerspot butterfly habitat.

Driver: Comply with the ESA, which requires that MCAS Miramar have reliable population data on federally listed species for the entire Station, to support military training activities with minimal disruption. While this species is not known to occur on Station, the USFWS recommended in their comments on the 2006 draft MCAS Miramar INRMP that a must fund project be added to surveys for the Quino checkerspot butterfly due to the last survey effort being conducted on Station in 1998 and recent 2005 sightings of this species adjacent to the eastern boundary of the Station. This project is being planned and designed to update the occurrence of this species on the Station.

Required Funding: 2010 – \$110,000, Class 1, OPBUD Funds

Regulatory Approvals Required: None; plan to coordinate Scope of Work with USFWS.

Project implementation vehicle: Contract

Priority: OPBUD: 2010-4

Success Monitoring: Surveys for the Quino checkerspot butterfly are completed on time and have information that is usable for management decisions.

Objective 2: Proactively manage Special Status Species habitat.

Other Planned Project:

Project: Endangered Willowy Monardella Habitat Enhancement – (MI0600003)

Description: Implement habitat enhancement actions at sites occupied by willow monardella, with an emphasis on removing competition from invasive plant species.

Driver: Comply with ESA, which requires that MCAS Miramar manage federally listed species habitat, to avoid Critical Habitat designation and support military training activities with minimal disruption.

Implementation Timeframes: Initiate project in 2006

Required Funding: 2006 - \$120,000, Class 2, Agriculture Outlease funds

Regulatory Approvals Required: USFWS

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2006 – 4

Success Monitoring: A positive, healthy response by willow monardella plants to enhancement actions and a determination of feasibility and cost of expanded efforts. Demonstrated conservation and proper management that meets ESA criteria to avoid Critical Habitat designation on MCAS Miramar.

Section 7.5.1, Vernal Pool Habitat Management

Objective 1: Take proactive action to prevent damage to vernal pool habitat.

Must Fund Project:

Project: Vernal Pool Management – MI82949

Description: Place field markers, signs, or fencing around vernal pool habitat groups with a higher susceptibility for damage to prevent accidental and/or unintentional damage; site specific mapping/survey needs to support operations and management; minor restoration (*e.g.*, weeding, recontouring) might also be included.

Driver: Manage vernal pool habitat to comply with the ESA and CWA and to support military training activities with minimal disruption.

Implementation Timeframes: Ongoing, annually

Required Funding: \$10,000 annually, Class 1, OPBUD funds

Regulatory Approvals Required: Possibly USFWS and/or U.S. Army Corps of Engineers

Project Implementation Vehicle: In-house/small contract, depending on action

Priority: OPBUD: 2006 - 6; 2007 - 8; 2008 - 7; 2009 - 5; 2010 - 6

Success Monitoring: Damage to vernal pool habitat is repaired and accidental damage to vernal pool habitat is reduced.

Other Planned Projects:

Project: Vernal Pool Burn Study – MI0NR05

Description: Continues study of vernal pool habitat burned in 2001 as a result of a wildfire started along State Route 163 that was subsequently burned again by the October 26, 2003 Cedar Fire. Study will monitor unaided recovery of vernal pool habitat burned in 2000 and again in 2003 and vernal pool habitat studied as unburned controls prior to the Cedar Fire that have only burned once.

Driver: Enhanced management of vernal pool threatened and endangered species and their habitat to support ESA compliance.

Implementation Timeframe: Continue studies through 2009

Required Funding: 2006 - \$32,000, Class 2, Agricultural Outlease funds

Regulatory Approvals: None

Project Implementation Vehicle: In-house staff of Naval Facilities Engineering Command, Southwest/Contract

Priority: Ag Outlease: 2006 - 6

Success Monitoring: Annual winter and spring data collection is completed and report presenting results, findings, and conclusions is delivered that provides an understanding of the effects of wildfire on vernal pool habitat.

Project: Miramar Mounds Interpretative Trail – MI1000001

Description: Design an interpretative trail for educational field tours at the Miramar Mounds National Natural Landmark that avoids or minimizes damage to vernal pool habitat and associated Special Status Species.

Driver: Manage vernal pool habitat to comply with the ESA and CWA and to support military training activities with minimal disruption.

Implementation Timeframes: Initiate design in 2010

Required Funding: 2010 - \$100,000, Class 3, Agricultural Outlease funds

Regulatory Approvals Required: USFWS

Project Implementation Vehicle: Contract/Cooperative Agreement, possibly with USFWS

Priority: Ag Outlease: 2010 - 4

Success Monitoring: Damage to vernal pool habitat at the Miramar Mounds National Natural Landmark by educational field tours is minimized and the learning experience is enhanced.

Project: Vernal Pool Interpretive Display – MI0900001

Description: Design and develop a permanent vernal pool habitat public education and interpretive display at a site where existing vernal pools are enhanced/restored for public education on the Main Station area.

Driver: Educate Station personnel about vernal pool habitat to support compliance with the ESA and to support military training activities with minimal disruption.

Implementation Timeframes: Initiate in 2009

Required Funding: 2009 - \$80,000, Class 3, Agricultural Outlease funds

Regulatory Approvals Required: USFWS; possibly Army Corps of Engineers

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2009 - 4

Success Monitoring: Completion of a permanent vernal pool public education and interpretive display for public education on the Main Station area.

Section 7.5.2, General Wetlands Management

Objective: Identify and manage wetlands on MCAS to maintain no net loss of wetland values.

Must Fund Project:

Project: Delineation of Non-vernal Pool Wetlands – MI97014

Description: Update and improve GIS data for wetlands and CWA jurisdictional Waters of the U.S. for planning level mapping of all wetlands on the Station. Identify potential wetland mitigation sites that the Station could use to mitigate for adverse wetland impacts to support mission requirements. If sufficient funding is available, detailed permitting jurisdictional delineations will be conducted for drainages on the Station in close proximity to developed areas.

Driver: Obtain accurate wetland data to comply with the CWA and support military mission activities with minimal disruption.

Implementation Timeframes: Initiate in 2007

Required Funding: 2007 - \$100,000, Class 1, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: OPBUD: 2007 - 5

Success Monitoring: Completion of updated GIS databases of non-vernal pool wetlands and CWA jurisdictional Waters of the U.S. on MCAS Miramar.

Section 7.6.1, General Wildlife Management

Objective: Maintain healthy wildlife populations as a component of the ecosystem.

Must Fund Project:

Project: Long-term Ecosystem Monitoring (Faunal Component) – MI95556

Description: Resurvey the wildlife species component of LTEM program. Analyze and compare with results of 1999-2000 wildlife surveys.

Driver: Comply with the proposed rule on migratory birds and collect other data to support a position that military use of the land is not having a significant impact on the environment, particularly on wildlife species distribution.

Implementation Timeframes: Initiate in 2008

Required Funding: 2008 - \$150,000, Class 0, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract

Priority: Ag Outlease: 2008 - 4

Success Monitoring: Delivery of databases and analysis report that are compatible with current databases and provide analysis of changes and causes of changes in wildlife species distribution and occurrence.

Section 7.8, Geospatial Data Management

Objective: Maintain MCAS Miramar GIS natural resources geospatial databases, ensuring that all information is current and up-to-date; develop new natural resources databases as new data and information become available; ensure that all GIS information is available to biologists, planners, contractors, and others in a quick and timely manner; and maintain an operational GPS unit to quickly and accurately map natural resources.

Other Planned Projects:

Project: Aerial Photo/Imagery – MI1NR08

Description: Provides updated high quality, aerial digital imagery that is ortho-rectified (current imagery is from March 2004) of MCAS Miramar and surroundings to support Station planning and assessments to be used with MCAS Miramar GIS database and GPS.

Driver: Use up-to-date aerial digital imagery for planning and assessments to meet compliance requirements of such laws as ESA, CSA, and NEPA and to support the military mission through minimization of environmental issues.

Implementation Timeframes: Initiate in 2007

Required Funding: 2007 - \$10,000, Class 2, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Purchase via regional partnership efforts

Priority: OPBUD: 2007 - 6

Success Monitoring: Whether or not the imagery is obtained and is useful for supporting Station planning and assessments.

Project: Aerial Photographs – MI65555

Description: Provides aerial photographs from low-level overflights to obtain 1 inch:400 feet hard copy photos and a georeferenced digital imagery layer to be used with MCAS Miramar GIS.

Driver: Use up-to-date aerial photos and digital imagery for planning and assessments to meet compliance requirements of such laws as ESA, CSA, and NEPA and to support the military mission through minimization of environmental issues. Supports planned Vegetation Mapping scheduled for subsequent year.

Implementation Timeframes: Initiate in 2007

Required Funding: 2007 - \$60,000, Class 3, Agricultural Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Contract/Purchase

Priority: Ag Outlease: 2007 - 4

Success Monitoring: Whether or not the imagery is obtained and is useful for supporting Station planning and assessments.

Section 7.10, INRMP Planning

Objective: Review and update this INRMP at least every five years or when major changes are made to the natural resources program; coordinate this update with the USFWS and CDFG.

Must Fund Project:

Project: Prepare INRMP/Environmental Assessment – MI40225

Description: Review and update this INRMP; coordinate this update with the USFWS and CDFG.

Driver: Comply with Sikes Act to develop and implement an INRMP that meets natural resources regulatory requirements and manages MCAS natural resources in a manner to support the Station military mission.

Implementation Timeframes: Initiate in 2009

Required Funding: 2009 - \$150,000, Class 1, OPBUD funds

Regulatory Approvals Required: USFWS and CDFG

Project Implementation Vehicle: Contract

Priority: OPBUD: 2009 - 4

Success Monitoring: Whether this INRMP is reviewed and updated in compliance with the Sikes Act before 2011.

Section 9.2.1, INRMP Implementation Professional Staffing

Objective: Provide professional, well trained staffing and appropriate supplies and equipment for the MCAS Miramar natural resources program to effectively implement this INRMP.

Must Fund Projects

Project: Manpower (Labor) – MI0300003

Description: Provide the manpower to implement the natural resources management program at MCAS Miramar, particularly to implement the INRMP.

Driver: Comply with various natural resources-related laws to allow completion of the military mission and operate a program to maintain fully functioning native ecosystems that can support military training activities.

Implementation Timeframes: Annually

Required Funding: 2006-10 - \$295,000 annually (with adjustments for inflation), Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: In-house

Priority: OPBUD: all years 1

Success Monitoring: There is adequate staffing to ensure that sufficient numbers of professionally trained natural resources management staff are available to perform the tasks required by the INRMP.

Project: Natural Resources Training/Travel – MI69690

Description: Provide natural resources training for all Natural Resources Division personnel to ensure they receive training necessary to keep current in environmental regulations, technology, and management practices.

Driver: Understand requirements to comply with various natural resources-related laws in order to allow completion of the military mission and manage an effective, efficient natural resources program to support the military mission.

Implementation Timeframes: Annually

Required Funding: 2006-10 - \$10,000 annually (with adjustments for inflation), Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: In-house

Priority: OPBUD: 2006 – 7; 2007 – 7; 2008 – 6; 2009 – 6; 2010 - 7

Success Monitoring: There is adequate training provided to ensure that professionally trained natural resources management staff are available to perform the tasks required by the INRMP (similar to training described in Section 9.2.2.1).

Project: Natural Resources Supplies – MI72633

Description: Provide modern equipment and technology as well as the regular procurement of supplies needed to conduct day-to-day operations and provide support to several small-scale projects.

Driver: Maintain a natural resources program that can effectively comply with various natural resources-related laws to allow completion of the military mission and maintain fully functioning native ecosystems that can support military training activities.

Implementation Timeframes: Annually

Required Funding: 2006-10 - \$8,000 annually (with adjustments for inflation), Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: In-house

Priority: OPBUD: all years 2

Success Monitoring: There are adequate supplies and equipment support the tasks required by the INRMP.

Project: GIS/GPS Supplies, Equipment, and Maintenance – MI22202

Description: Ensure that all GIS/GPS computer hardware, software, peripherals, and maintenance agreements are current; hardware and software are capable of complex computations and manipulations with large data sets; detailed graphics are viewable; and quality maps and reports can be produced. Ensure GPS hardware and software are technologically advanced and capable of withstanding extreme mapping conditions (*e.g.*, weather).

Hardware and software must be consistent with latest Marine Corps guidance.

Driver: Provide accurate and current geospatial data to maintain proactive natural resources programs and provide critical data and information when needed for compliance with federal laws relating to natural resources, such as the ESA, CWA and NEPA. Geospatial data are needed to support the military mission through minimization of environmental issues.

Implementation Timeframes: Annually

Required Funding: \$8,000 annually, Class 0, OPBUD funds

Regulatory Approvals Required: None

Project Implementation Vehicle: In-house

Priority: OPBUD: 2006 – 8; 2007 – 9; 2008 – 8; 2009 – 7; 2010 - 8

Success Monitoring: A determination of the effectiveness of geospatial natural resources data to assist in MCAS Miramar decision-making.

Section 9.2.2, Project Support

Objective: Provide project support needed to implement this INRMP.

Must Fund Project

Project: Natural Resources Project Support - MI0300009

Description: Provides a project management support option for contracting, natural resource cooperative agreements, and project oversight.

Driver: Maintain a natural resources program that can effectively comply with various natural resources-related laws to allow completion of the military mission and maintain fully functioning native ecosystems that can support military training activities.

Implementation Timeframes: Annually, as needed

Required Funding: 2006 - \$45,000, 2007-10 - \$40,000 annually, Class 0, Agriculture Outlease funds

Regulatory Approvals Required: None

Project Implementation Vehicle: Naval Facilities Engineering Command, Southwest

Priority: Ag Outlease: all years 2

Success Monitoring: The degree and quality of support provided by the Naval Facilities Engineering Command, Southwest to implement tasks required by the INRMP.